PATENT USSN: 10/560,296

Atty Dkt: 034176.004

## **AMENDMENT**

## IN THE CLAIMS:

Please amend the claims as follows:

- 1. (Canceled)
- 2. (Currently amended) A method for the preparation of low molecular weight chitosan oligosaccharides, which comprises:
  - 1) quantitatively weighing chitosan powder,
- 2) adding an electrolyte solution to the chitosan powder to obtain a obtain a chitosan:electrolyte solvent (W/V) ratio = 1:8~30, wherein the electrolyte solution comprises a salt and an acid in solution,
- 3) stirring the solution to uniformity, then subjecting the solution to microwave irradiation,
- 4) adjusting the solution to neutrality with 1~10 M NaOH, KOH or ammonia water to obtain a pale yellow floc and then settling the floc at least 30 minutes at 1~10 °C in a cold closet,
- 5) filtering the pale yellow floc to obtain a precipitate and then desiccating the precipitate at 50~70°C to obtain a dried product,
- 6) crushing the dried product to 20~100 mesh and assaying the molecular weight of chitosan oligosaccharides, and taking chitosan oligosaccharides having a molecular weight of 600~30000 Da as the finished product.
- 3. (Canceled)
- 4. (Currently amended) The method according to the claim 3 claim 2, wherein the electrolyte salt is NaCl, KCl, CaCl<sub>2</sub> or FeCl<sub>3</sub>.
- 5. (Currently amended) The method according to the claim 3 claim 2, wherein the ionic strength of electrolyte solution is 0.01~0.1.

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6. (Currently amended) The method according to the claim 3 claim 2, wherein the acid is hydrochloric acid, acetic acid, citric acid, tartaric acid, formic acid, and wherein the concentration of tartaric acid and citric acid is 0.5~4% (W/V), and the concentration of hydrochloric acid, acetic acid and formic acid is 0.5~4% (V/V).

- 7. (Currently amended) The method according to the claim 3 claim 2, wherein the microwave energy is 480~800 W.
- 8. (Currently amended) The method according to the claim 3 claim 2, wherein the microwave irradiation time is  $1\sim12$  minutes.
- 9. (Currently amended) The method according to the claim 2,  $\frac{3}{7}$  or 8, wherein the molecular weight of the chitosan oligosaccharides obtained from the electrolyte solution comprising NaCl ranges from  $2.5 \times 10^4 \sim 9.14 \times 10^3$  Da.
- 10. (Currently amended) The method according to the claim 2,  $\frac{3}{7}$  or 8, wherein the molecular weight of the chitosan oligosaccharides obtained from the electrolyte solution comprising KCl ranges from  $2.0 \times 10^4 \sim 6.02 \times 10^2$  Da.
- 11. (Currently amended) The method according to the claim 2,  $\frac{3}{4}$ , or 8, wherein the molecular weight of the chitosan oligosaccharides obtained from the electrolyte solution comprising CaCl<sub>2</sub> ranges from  $1.8 \times 10^4 \sim 4.79 \times 10^2$  Da.
- 12. (Currently amended) A method for the preparation of low molecular weight chitosan oligosaccharides, which comprises:

exposing an electrolyte solution containing <u>a salt and an acid in solution and</u> chitosan to microwave irradiation, wherein the acid is selected from the group consisting of: 0.5~4% (V/V) hydrochloric acid, 0.5~4% (V/V) acetic acid, 0.5~4% (W/V) citric acid, 0.5~4% (W/V) tartaric acid, and 0.5~4% (V/V) formic acid.